



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,007	03/26/2004	David L. Robinson	0739D-000105	2659

27572 7590 01/13/2006

HARNESS, DICKEY & PIERCE, P.L.C.

P.O. BOX 828

BLOOMFIELD HILLS, MI 48303

EXAMINER

EDELL, JOSEPH F

ART UNIT

PAPER NUMBER

3636

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/812,007	ROBINSON ET AL.	
	Examiner	Art Unit	
	Joseph F. Edell	3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 10, 15, and 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,880,890 B1 to DeBrabant.

DeBrabant disclose a seat assembly that includes all the limitations recited in claims 10, 15, and 23-25. DeBrabant shows a seat assembly having a seat bottom 120 (see Fig. 6), a seatback 104 pivotally supported by the seat bottom, a recliner mechanism 106 operable between a locked position restricting rotation of the seatback relative to the seat bottom and an unlocked position permitting rotation of the seatback relative to the seat bottom, and a headrest assembly 10 supported by the seatback and including a first housing 14 (see Fig. 2) with a fixedly attached cross-member 76, a second housing 12 rotatably supported by the first housing, and a lock mechanism 18 (see Fig. 1) including a coil spring 90 operable to engage the cross-member to restrict rotation of the second housing when the recliner mechanism is in the locked position

Art Unit: 3636

and to disengage the cross-member to permit rotation of the second housing when the recliner mechanism is in the unlocked position, a lever 78 of the lock mechanism that is operable to toggle the lock mechanism between the lock and unlocked positions wherein the coil spring at least partially surrounds the outer diameter of the cross-member, the first housing plate includes a pair of flanges 22,24 with the cross-member has first and second ends fixedly attached to the pair of flanges, and the first housing plate is fixedly attached to the seatback via the adjustment bar 30.

3. Claims 16-18, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,641,884 to Miyashita et al.

Miyashita et al. disclose a seat assembly that includes all the limitations recited in claims 16-18, 21, and 22. Miyashita et al. show a seat assembly having a seat bottom 2 (see Fig. 1), a seatback 3 pivotably supported by the seat bottom, a recliner mechanism 4 operable between a locked position restricting rotation of the seatback relative to the seat bottom and an unlocked position permitting rotation of the seatback relative to the seat bottom, a headrest assembly 3c supported by the seatback wherein the headrest assembly has a first housing 42 (see Fig. 3) fixedly attached to the seatback, a second housing 43 rotatably supported by the first housing, a lock mechanism 5 operable to restrict rotation of the second housing when the recliner mechanism is in the locked position and to permit rotation of the second housing when the recliner mechanism is in the unlocked position, a lever 51 operable to toggle the lock mechanism between the unlocked and locked positions, a cable seat of the lever, and a cable 8 attached to the cable seat at a first end and to the recliner mechanism at a second end wherein the,

headrest assembly includes a cross-member 46 (see Fig. 7) fixed attached to the first housing, a lock member 44,48 of the lock mechanism that engages the cross-member, the lever is rotatably attached to the cross-member, a biasing member 56 operable to bias the lever and urge the lock member into the locked position, a coil spring 36 operable to bias the second housing into the upright position, and the cable is operable to transmit a force from the recliner mechanism when the recliner mechanism is in the unlocked position to rotate the lever and unlock the lock mechanism.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeBrabant in view of Miyashita et al.

DeBrabant discloses a seat assembly that is basically the same as that recited in claims 11 and 12 except that the lever lacks a first cable seat and first cable, as recited in the claims. Miyashita et al. show a seat assembly similar to that of DeBrabant wherein the headrest assembly has a lock mechanism with a lever (see Fig. 7), a first cable seat of the lever, and a first cable 8 attached to the first cable seat at a first end and to the recliner mechanism 4 (see Fig. 3) at a second end such that the first cable operates to transmit a force from the recliner mechanism when the recliner mechanism

is in an unlocked position to rotate the lever and unlock the lock mechanism. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the seat assembly of DeBrabant such that the lever of the lock mechanism includes a first cable seat, a first cable attached to the first cable seat at a first end and to the recliner mechanism at a second end wherein the first cable is operable to transmit a force from the recliner mechanism when the recliner mechanism is in the unlocked position to rotate the lever and unlock the lock mechanism, such as the seat assembly disclosed in Miyashita et al. One would have been motivated to make such a modification in view of the suggestion in Miyashita et al. that the cable interconnecting the lock mechanism of the headrest with the recliner mechanism provides a vehicle seat that has a reclining seatback with independently adjustable portions controllable from a central location on the seatback.

6. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeBrabant in view of U.S. Patent No. 5,681,079 to Robinson.

DeBrabant discloses a seat assembly that is basically the same as that recited in claims 13 and 14 except that the second housing lacks a second cable and second cable seat, as recited in the claims. Robinson shows a seat assembly similar to that of DeBrabant wherein the seat assembly has a seat bottom 12 (see Fig. 1A), a seat back 14, a recliner mechanism 44, and a headrest assembly 16 with first and second housings 130,132 (see Fig. 7). The second housing of Robinson includes a cable seat and a cable 150 fixedly attached to the cable seat at a first end and to the seat bottom at a second end (see Fig. 9A). Therefore, it would have been obvious to one having

Art Unit: 3636

ordinary skill in the art at the time the invention was made to modify the seat assembly of DeBrabant such that the second housing has a second cable seat, and a second cable fixedly attached to the seat cable seat at a first end and to the seat bottom at a second end such that the second cable is operable to rotate the second housing relative to the first housing when the lock member is in the unlocked position due to rotation of the seatback relative to the seat bottom, such as the seat assembly disclosed in Robinson. One would have been motivated to make such a modification in view of the suggestion in Robinson that the second cable and second cable seat configuration allows the headrest to be folded rearwardly to a dumped position when the seat back is folded to a forward storage position.

7. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita et al. in view of U.S. Patent No. 5,681,079 to Robinson.

Miyashita et al. disclose a seat assembly that is basically the same as that recited in claims 19 and 20 except that the second housing lacks a second cable and second cable seat, as recited in the claims. Robinson shows a seat assembly similar to that of Miyashita et al. wherein the seat assembly has a seat bottom 12 (see Fig. 1A), a seat back 14, a recliner mechanism 44, and a headrest assembly 16 with first and second housings 130, 132 (see Fig. 7). The second housing of Robinson includes a cable seat and a cable 150 fixedly attached to the cable seat at a first end and to the seat bottom at a second end (see Fig. 9A). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the seat assembly of Miyashita et al. such that the second housing has a second cable seat, and

a second cable fixedly attached to the seat cable seat at a first end and to the seat bottom at a second end such that the second cable is operable to rotate the second housing relative to the first housing when the lock member is in the unlocked position due to rotation of the seatback relative to the seat bottom, such as the seat assembly disclosed in Robinson. One would have been motivated to make such a modification in view of the suggestion in Robinson that the second cable and second cable seat configuration allows the headrest to be folded rearwardly to a dumped position when the seat back is folded to a forward storage position.

Response to Arguments

8. Applicant's arguments filed 09 November 2005 have been fully considered but they are not persuasive. With respect to independent claim 16, Applicant argues that Miyashita et al. fail to teach an adjustment mechanism in a headrest assembly. While the seat back 3 of Miyashita is divided into a lower portion 3a, an intermediate portion 3b, and an upper portion 3c, column 3, lines 5-6 specifically states that the upper portion 3c is prepared as a head restraint. Therefore, upper portion 3c meets the limitation of a headrest assembly that is supported by the seatback.

Next, Applicant argues that Miyashita et al. fail to teach an adjustment mechanism that selectively engages the cross-member because the lock gear 48 (see Fig. 7) does not engage the cross-member of the housing. However, Miyashita et al. teach a cross-member (hinge pin) 46 that pivotally connects with the lock member (gear and lock gear member) 44,48 wherein the teeth of the gear and lock gear member mate

when the recline mechanism is in the locked position to engage the cross-member and the teeth of the gear and lock gear member separate when the recliner mechanism is in the unlocked position to disengage the cross-member. Therefore, the lock member 44,48 of the headrest assembly meets the limitation of claim 16.

Applicant's arguments with respect to claims 9 and 13-15 as being anticipated by Dixon have been considered but are moot in view of the new ground(s) of rejection.

The rejection under 35 USC 103(a) drawn toward claims 19, and 20 was argued solely on the premise that the cited art does not teach or suggest the seat assembly recited in independent claim 16, and as a result the above 35 USC 103(a) rejection of claims 19, and 20 remains.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


Art Unit: 3636

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph F. Edell whose telephone number is (571) 272-6858. The examiner can normally be reached on Mon.-Fri. 8:30am-5:00pm.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JE
January 10, 2006


Peter M. Cuomo
Supervisory Patent Examiner
Technology Center 3600